

HP StorageWorks Disaster  
Tolerant Solution for mySAP  
Business Suite on EVA  
Business blueprint



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## Executive summary

HP StorageWorks Disaster Tolerant Solution for mySAP Business Suite is a business continuance solution for mission-critical SAP environments. It provides best practices for implementing remote mirroring of the SAP database as part of an overall data protection strategy. The solution has the following attributes:

- **Predictable:** ensures fast recovery time
- **High performance:** ensures minimal impact on application operations
- **Scalable:** implements solutions to meet different database sizes
- **Application aware:** is tested with a typical SAP application in HP labs
- **Automated:** after recovery process is invoked, automates recovery
- **Serviceable:** implements and maintains solution by customer of HP Services

## Business needs

To meet business needs, customers must:

- Have accessible global business protection
- Leverage information to maximize operations

Companies are becoming bigger and more complex, and they cover multiple geographies in a variety of time zones. To SAP users, it is not just having access to the data in a reliable manner—it is also having access to the information that allows better decision making at a faster pace.

To achieve business velocity, an organization needs a sound business continuity strategy that allows it to reduce planned and unplanned downtime to a minimum.

In addition to being able to act quickly on information at their fingertips, SAP customers may also be thinking: What happens if we cannot access information? Are we no longer competitive? Have we automatically lost market share? How do we mitigate risk in our business without having constant access to information at real-time speeds?

According to a study made by Giga, the cost per hour of downtime of an application in an organization can range from thousands to millions of dollars, depending on the industry. The downtime per hour of tele-ticket sales in the entertainment industry costs approximately \$83,000, while the downtime per hour of pay-per-view is \$183,000, and almost \$8,000,000 for brokerage operations.

# Solution summary

Data security and availability are critical to the success of mySAP Business Suite customers. They require a computing solution that protects their information systems from disasters such as power outages, earthquakes, fires, floods, or acts of vandalism. The disaster tolerant solution for mySAP Business Suite is a storage application solution that is integrated and tested in an SAP environment. It provides proof points on how HP StorageWorks Continuous Access Enterprise Virtual Array (EVA) provides disaster tolerant capabilities to enhance mySAP Business Suite

configurations. Continuous Access EVA can copy data online and in real time to remote locations by way of a local or an extended Storage Area Network (SAN). Using the Continuous Access software, data replication is performed at the storage system level and in the background to any host activity.

This solution provides a cost-effective data movement and disaster-recovery solution to ensure that, in the event of a disruption at the production site (scheduled or unscheduled), customers will be able to fail over to an alternative site containing an exact copy of the data being used in the mySAP Business Suite application.

## Return on investment (ROI)

Solution feature	Impact on SAP environment	ROI effect
<ul style="list-style-type: none"><li>• Maintains mySAP Business Suite data-base functionality</li></ul>	<ul style="list-style-type: none"><li>• Ensures minimal impact on functioning operation</li></ul>	<ul style="list-style-type: none"><li>• Allows for higher availability of mySAP Business Suite applications</li></ul>
<ul style="list-style-type: none"><li>• Provides data protection by granting the ability to rapidly restore mission-critical databases</li></ul>	<ul style="list-style-type: none"><li>• Increases availability of critical business information used to run the enterprises</li></ul>	<ul style="list-style-type: none"><li>• Maintains business operations and revenue flow</li></ul>
<ul style="list-style-type: none"><li>• Is fully integrated, tested, and supported by HP</li></ul>	<ul style="list-style-type: none"><li>• Mitigates business risk and prevents negative impact to business operations</li></ul>	<ul style="list-style-type: none"><li>• Reduces complexity and time-to-implement solution</li></ul>

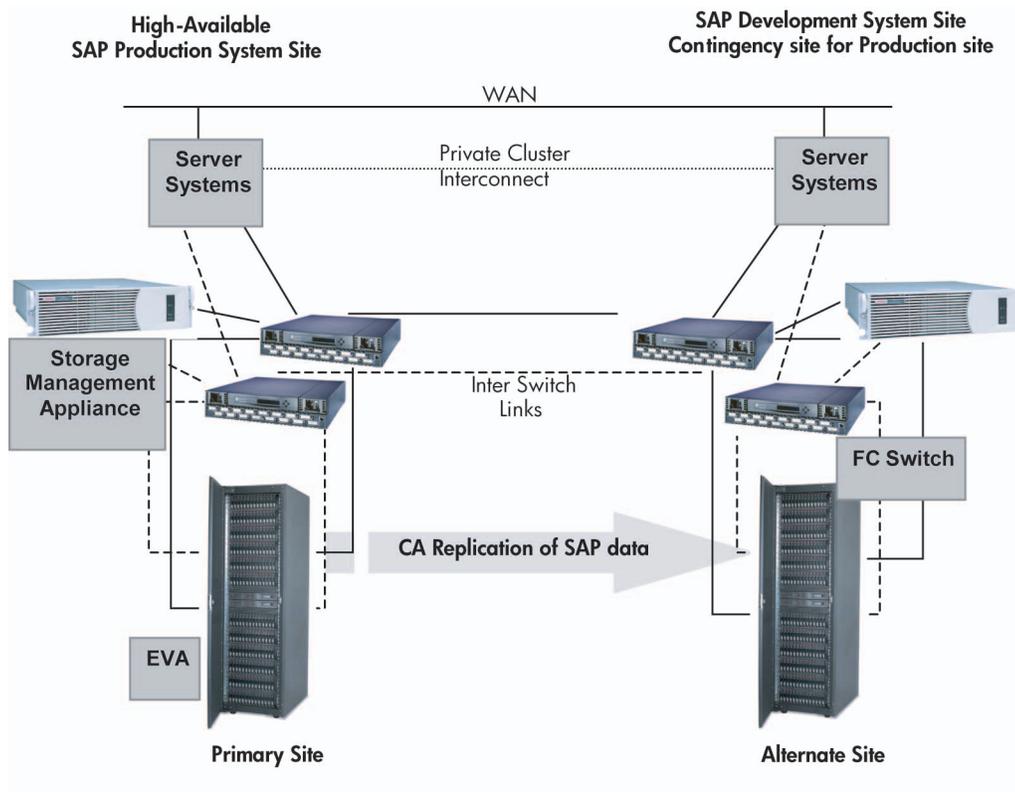
# Solution description

Site replication can achieve disaster tolerance in a mySAP Business Suite environment. Disaster tolerance is characterized by a short recovery time and avoidance of data loss. In a disaster tolerant system based on this approach, redundant, active servers and client interconnects are located at geographically separated sites. As mySAP Business Suite applications produce data, this data is copied by a replication system whose function is to maintain consistent replicas of the data at each site. Should the system at one site suffer a disaster, mySAP Business Suite instances that were running at the now-disabled site can be failed over to a surviving site that has the resources to support them. The primary site is the original site where the SAP application is running; the alternate site is where the second copy of the data is stored. The alternate site does not have to be dedicated to the SAP application. The process of failing over a mySAP Business Suite application to the alternate site node involves mak-

ing the replicated data of the application accessible and starting instances on the alternate node site to restore application availability. The solution functionality includes:

- Allowing all data to be mirrored for parallel structure between storage elements in two different storage arrays that can be in separate geographical locations.
- Sending each I/O write access to both storage locations, and having reads occur only at the local storage location.
- Having Continuous Access EVA copy data online and in real time to remote locations through a local or extended SAN.

Fig 1.



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## Value proposition

- Protection of business data against hardware and software failures, as well as human errors
- Quick, complete, and fully automated recovery of mySAP Business Suite of data
- A trouble-free deployment pretested and preconfigured for quicker installation or customization
- Assurance of data integrity
- Simplified administration of restore functions
- Engineered within SAP guidelines

## Services

- **SAP Basis engineers:** The HP Services organization has more than 1,000 SAP Basis-trained engineers who work with HP SAP customers. HP/SAP specialists can help customers who have issues in their environment from both an HP and an SAP perspective—one of the reasons HP has won the SAP Award of Excellence six years in a row.

- **One-stop help:** HP has an integrated support plan with SAP that allows customers to call HP for any problems they have with their SAP environment.
- **Call-to-repair support:** HP is the only vendor to provide a call-to-repair support agreement to ensure any problems in a customer's mission-critical environment are solved quickly and efficiently.
- **Design and implementation services:** HP has SAP-trained and experienced consultants who provide designs and implementations specifically for the SAP mission-critical environment.

## Why HP

- **Ensures continuous uptime** by systematically eliminating single points of failure across the board—from the hardware right up to the SAP application level. HP solutions for SAP provide instant, automated switchover for hardware, operating system, database, and SAP components, ensuring service continuity in the event of failure.
- **Delivers security** with solutions that perform encryption for secure transactions and instant authorization/authentication checks.
- **Enables rapid deployment of mySAP Business Suite solutions** because HP consultants, cooperating closely with SAP, use a structured approach based on SAP best practices to help customers design and implement the IT infrastructure that their enterprise needs to ensure a smooth, speedy rollout of mySAP Business Suite solutions.
- **Provides end-to-end control** of the entire mySAP Business Suite environment with management tools and support services that manage every component, from hardware to application—even in distributed, Internet-based system environments.
- **Enables faster recovery time** to ensure that the customer's SAP environment is restored with minimal impact to business.
- **Provides the highest level of storage performance in the industry**, which contributes to higher productivity of the customer's SAP resources.

## For more information

To learn more about HP storage solutions, contact your local HP sales representative or visit our Web site at [www.hp.com/go/storage](http://www.hp.com/go/storage).

To learn more about HP SAP alliance, visit our Web site at [www.hp.com/go/sap](http://www.hp.com/go/sap).

To learn more about HP's offering, visit [www.hp.com](http://www.hp.com).

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